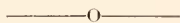


times driven many of us nearly wild, but a half-day with Mr. Edwards's types convinced me that he knew just what he was doing when his collection was at hand, no one better.

There are many collections yet in the East and Northeast which it is my ambition to visit, but enough was seen during this trip to convince that it would be wise to go home and permit what had been seen to soak in, reserving other treats for other times and to avoid the utter confusion which results from seeing too much.

In but one case was there failure to see a collection which it was planned to see, and then the owner was out of town. From him soon came a letter of regret that he was not able to show me his collection. Such unlimited hospitality and cordiality as I met from those upon whom I had no claims but the common interest in entomology speaks volumes for the people who have collections.

Even the western spirit of "help each other" was equaled; for one of the great collectors insisted upon filling a box with species new to my collection, which he compelled me, I trust not too unwillingly, to bring home.



RECOLLECTIONS OF OLD COLLECTING GROUNDS.

BY H. F. WICKHAM, Iowa City, Iowa.

VIII. The Buena Vista Valley.

We left Colorado Springs on the 29th of June, and after a few hours' ride through beautiful mountain scenery arrived, late in the afternoon, at the station of Buena Vista. The railroad on which we came does not enter the valley proper until it has paralleled it for some distance, and the depot lies on the mountain-side, high above the town, affording the new-comer a very comprehensive view of the surroundings. From this point of observation in the foot-hills of the Park range he sees at his feet the wide valley of the Arkansas River, extending across to the Saguache range, which here forms the Continental Divide. The town is a neat-looking one, considering its size and location. It lies near the head of the valley proper, which soon narrows to a mere gorge as the river bed is ascended towards Leadville. Looking in the other direction,

however, one sees a long broad stretch of tillable land extending downward along the course of the Arkansas, and the numerous farms which dot the landscape show the neighborhood a well-settled and thriving one.

The altitude of this valley, in the vicinity of Buena Vista, is between 7,900 and 8,000 feet. The soil is sandy, often gravelly or stony, the waste places covered more or less thickly by a growth of scrubby pine, the open spots supporting a flora more characteristic of the plains than of the mountains. The creek bottom is grown up with willows and cottonwoods, and has a sufficiently deep layer of dead leaves and forest mould to harbor many species of beetles which would certainly not be met with on bare sands. Cottonwood Creek, as it is called, is a clear stream, in favorable contrast to the Arkansas, which is a muddy yellow torrent rushing along at the bottom of a rocky gorge, affording at this place none of those broad reaches of damp meadow often so prolific of insects. A number of small marshes exist in the neighborhood of town, however, and help to give variety to the collecting.

In Cicindelidæ we found but few species; one example of *C. vulgaris* was picked up dead and proved to represent the form *obliquata* with extremely wide markings. *C. repanda* was rather common. *C. cinctipennis* was taken at one spot only, along a sandy little-frequented road in the creek-bottom, not close to the water however. By dint of hard work the three of us managed to get about seventy specimens during the course of the morning. It is less shy than many of the larger species, though not particularly easy of capture. The series shows a wonderful range of variation in elytral markings, though none approach the form *imperfecta* very closely. They are all obscure or blackish above, none showing the brilliant green tints which are to be seen on specimens from Arizona.

Some of the Carabidæ are well worthy of note. Under logs among the cottonwoods we got *Carabus oregonensis* and *C. servatus*, though but sparingly. Two species of *Elaphrus*, one of which is *clairvillei*, the other doubtfully *lecontei*, were found in marshy spots. A number of *Bembidium* were captured on muddy banks of large pools near the railroad tracks; they were mostly *bioculatum*, *lucidum*, *fuscicrum*, *nitidum*, *nebraskense*, *nigripes*, *præinectum* and *dubitans*, the first three rather

common, the remainder rare or less abundant. *Patrobis longicornis* was taken under stones in the same locality and with it a lot of *Platynus errans* and *cupripennis*. *Pterostichus protractus*, *P. luezoii*, and *Calathus dubius* were to be seen under logs near the creek. *Philophaga amœna* was found about the roots of yuccas. *Cymindis planipennis* and *Cratacanthus dubius* were rather plentiful beneath stones on dry sandy spots. One pair of *Chilenius interruptus* was taken in a very grassy little marsh. They seemed to me hardly referable to that species but Dr. Horn so decided. It was previously known from the Pacific coast only, so its occurrence here is of much interest. *Harpalus ochropus*, *fallax*, *clandestinus*, *obliquus* and *amputatus* were tolerably abundant on open spots under rubbish and stones.

A number of Coccinellidæ were beaten from herbage, among which may be mentioned *Hippodamia 5-signata*, *lecontei*, *convergens*, *spuria* and *parenthesis*, *Coccinella transversoguttata* and *monticola*, and *Harmonia picta*. *Ecochomus marginipennis* and variety *æthiops* occurred occasionally but not in any abundance. Of *Brachycantha* we found a form of *ursina* closely approaching *albifrons*. *Hyperaspis 4-rivata* occurred about roots of plants. We also met with the *Hyperaspidius* mentioned in my last paper, where I unfortunately, by a slip of the pen, wrote of it as occurring with aphides on cacti. I should have written with Coccidæ.

Elmis corpalentus was seen in small numbers in Cottonwood Creek, clinging to submerged logs. *Tripopitys punctatus* was met with once, under a tie near the railroad track. Of *Corymbites planulus* a few were taken from isolated stalks of rather high grass, where they were resting in the fashion often exhibited in the East by *Limonium griseus*. *Cardiophorus edwardsii* was beaten from dwarf pines but was quite rare. It is a western beetle, previously known from Nevada and California.

A great stack of telegraph poles, some of which were quite recently cut, was piled up just on the edge of the town. On this pile, by careful search, we got quite a number of timber-beetles of different families. In the Buprestidæ we took *Buprestis subornata* and *B. consularis*, *Melanophila drummondi*, *Chrysobothris dentipes* and *Chrysobothris trinervia*. A couple of *C. ignicollis* were taken at large. *Podabrus lateralis* was beaten from herbage along the road leading to the base of Mt. Prince-

ton. *Collops bipunctatus* was seen, not very abundantly, on low Compositæ near town. *Trichodes ornatus* was taken on flowers, particularly those growing on the higher altitudes among the foot-hills. *Clerus nigricentris*, *C. mæstus* and *Thanasimus undulatus* were all found running about the wood-pile in company with the aforementioned Buprestidæ.

Few Scarabæidæ were met with, among them *Ægialia lucustris*, *Aphodius hamatus* (this latter under dung close to the little swamp which furnished the *Chlenius*), *A. denticulatus* and *A. vittatus*. A single male of *Odontæus obesus* was secured and is of particular interest, since it is Pacific in distribution. Mr. Schwarz had, however, previously taken one at Veta Pass, altitude 9,400 feet. We took two species of *Serica*, one of them like *vespertina*, while the other approaches *trociformis* in appearance but differs in sculpture. A female *Lachnosterna rubiginosa* was found floating in an irrigating ditch.

Of Longhorns we took several. *Prionus californicus* was seen rarely, one specimen deserving note on account of reaching a length of but 25 mm., about half the usual size of the species. *Xylotrechus undulatus*, *Plagithmysus muricatus*, *Acmæops proteus*, *Monohammus maculosus* and *M. scutellatus* were all dwellers on the wood-pile. Some Chrysomelidæ observed are as follows: *Coscinoptera dominicana* on scrub oaks, *C. vittigera* rather common on various low plants in company with *Babia 4-guttata*, *Saxinis oncygera*, one specimen, *Plagioderma oviformis* and *Trichabida convergens*. On willows we saw *Galerucella decora* with *Disonychia 5-vittata* and *Crepidodera helvænes*. Tenebrionidæ were not numerous, but we took *Trimityls pruinosa* under stones or about the roots of plants, in company with *Coniontis obesa*, *C. oralis* and *Eleodes brunnipes*. Underties along the railroad were found a few each of *Eleodes humeralis*, *E. extricata* and *E. nigriua* and a single *Asida opuca*. *Helops difficilis* was not rare under pine needles or in the rubbish about the roots of plants. It seems not worth while to enumerate the other Heteromorous beetles found, and the rather small series of Rhynchophora.

A collector going into this valley will find it interesting as an example of the encroachment on rather high altitudes of many species belonging more properly to the plains fauna. This seems to result from the very gradual slope of the Arkansas valley and the peculiar characteristics of the soil.